

## ABSTRACT

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A digital communication receiver (300) communicates with a digital communication transmitter across a communication channel and has: a channel estimator (330), which provide a channel estimate ( $H_c$ ) of the communication channel based on a received signal ( $y_c$ ); an equalizer (340), which estimates a sequence of transmitted symbols ( $u_c$ ) and provides a sequence of decided symbols ( $\hat{u}_c$ ) based on the received signal and the channel estimate; and a channel tracker (350), which produces an updated channel estimate ( $H_t$ ) based on the received signal ( $y_c$ ) and the decided symbols ( $\hat{u}_c$ ), and which supplies the updated channel estimate to the equalizer. The digital communication receiver (300) also has a controller (370), which receives channel quality indicative data (Metric) associated with an output from the equalizer, determines whether these data fail to meet a predetermined criterion, and, if so, supplies an enabling control signal ("Tracker y/n?") to the channel tracker, so that the channel tracker will switch from a disabled state, in which no updated channel estimate ( $H_t$ ) is produced, to an enabled state, in which said updated channel estimate ( $H_t$ ) is produced.

To be published together with FIG 3.